



VTAC Operation - Please save these instructions

1. Automatic Startup:

Your VTAC starts when you start your engine; you don't have to turn it on or off.

To clear recorded results from memory -
Push the "VTAC" logo between the Recall & Light keys

2. RPM Readings:

Your VTAC is built for Oval Track Racing, and will record your Max RPM and Best Lap, PLUS 2 high and 2 low RPM levels for every lap - up to 100 laps!

- While you are on the track, your VTAC **DISPLAYS RPM**.
- Once you reach 4000 RPM (or >5500 for Minisprints) with a 500+ RPM difference between the high and low, your **VTAC begins recording**. Your VTAC records your **2 high and 2 low RPMs per lap**.
- Yellow flag laps are ignored (we store only the first lap of the yellow)
- After racing your VTAC will display **0000**. This means you have recorded laps in memory that you can look at any time until you clear the memory – either by pushing the “hidden key” behind the VTAC logo or by restarting your motor.

3. To See Your Max RPM & Best Lap

- **Hold the RECALL button in for 3 seconds**
- **The top line shows MAX rpm & BEST lap.**

The second line shows the BEST LAP RPMs (the lap with the highest highs & highest lows.)



4. To See All Your Recorded Laps:

- **Press and release the RECALL button to scroll through each lap of your race (from 1 to 100 laps).**
- The top line stays the same, and the second line will show each lap in turn.



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5. Sleep Mode:

To save your battery **your VTAC will go into SLEEP mode after one minute of inactivity**. Push RECALL once to return to the results.

6. **Clear Memory:** Your race results are kept in memory until you clear them out or you restart your motor.



To manually clear the memory push the “hidden key” behind the VTAC logo

7. Light:

The backlight will come on for **30 seconds** when you push the LIGHT button.



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8. Helpful Hints:

- **Reviewing Lap results-** for instance for 2 qualifying laps. Please keep in mind where lap timing starts versus where your car was pushed off, to tie the VTAC results back to the correct lap.
- **The VTAC is water resistant, but not WATER PROOF.**
Be sure to remove your VTAC when washing your car – *high-pressure water may damage the electronics inside the tach.*
 - ❑ Simply unplug the cable from the back,
 - ❑ Pull & turn the knob on the front of the bracket
 - ❑ Slide your VTAC out the back
 - ❑ Store your VTAC in the original box or other protected container.
 - ❑ Store your VTAC away from extremes of heat and moisture.
- **A 9-volt battery powers your VTAC.** You may use ANY standard size 9- volt battery - either Alkaline or Lithium. To replace the battery remove the 4 Allen head screws on the back cover. **BE VERY CAREFUL WHEN REPLACING BATTERIES THAT WIRES ARE NOT CAUGHT BETWEEN THE FRONT AND BACK OF THE HOUSING.**

9. SETUP:

Your VTAC is pre-set for an 8-cylinder engine with magneto ignition. If you run something different, you can easily change the VTAC setting. If using a DISTRIBUTOR, select “Non MAG”.

To See the Current Setting:

- Press the RECALL button for **15 seconds**.

To change the setting (for example if you run a Midget 4-Cylinder, Minisprint, or use a Distributor (“non mag”) instead of a Magneto)

- Press the RECALL button for **15 seconds**, until the current setting displays.
 - Then release the RECALL button.
- In 3 seconds, you will see “**SETUP**” appear at the top right.
- Immediately **press and hold the RECALL button to scroll through the settings until your choice appears.**
- Release the RECALL button to lock in the new setting.



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10. Troubleshooting:

I) "RPM is reading too low"

Check SETUP is correct for your car (see previous section).

Your VTAC works for 8 & 4 cylinder race cars, and EITHER magnetos or distributors, so if the rpm is off, the settings may be off.

See page 3 of this guide to change the setting.

II) "The Screen is Blank"

More than likely, this is a dead battery, so change the 9-Volt battery first.

Remove the 4 screws from the VTAC back with an ALLEN wrench. Ease the back off. (TIP – use a flat screwdriver in the slot or thin blade to get it started). *Please do not let the back hang from the wires to the board.* **Check for damage - such as corrosion due to water.** If you do not spot damage, just replace the battery. Carefully replace the back so the wires are not pinched.

III) "Scrambled Characters" or "Gibberish" appears, and then clears. Generally this is due to ELECTRICAL INTERFERENCE

1) Check Your VTAC Wire Connections.

- Keep VTAC wires away from ALL high voltage wires and cables.
 - **DO NOT Bundle VTAC wires to other cables or wires.**
- Ground the **Black wire** to a cylinder head on your Engine Block
 - **NOT** the frame or kill switch.
- Check your *VTAC installation guide* for your ignition
 - Be sure you have right connector on the **White wire – especially** Sprintmag and Vertex ignitions.
- Check that the connector is not broken inside – check for electrical conductivity through the connector.
- Check the wires and connectors are firmly attached

2) Check Your System for Sources of Interference:

- Cracked Mag cap
- Loose plug wire
- Cracked plug wire
- Arcing plug wires
- Bad points in Magneto
- VTAC wiring too close to high voltage components, wires or cables

If all checks out, please contact your dealer or www.vtacracing.com for technical assistance.